OBJECTIVES: The Pediatric Economic Database Evaluation (PEDE) Project features a database of 787 pediatric economic evaluations published between 1980 to 1999. Our research objective was to use the PEDE database to examine trends in the application of health economic methods to a pediatric population.
METHODS: Frequency distributions and cross-tabulations were performed on the following variables: period of publication, age group, ICD-9-CM category, intervention, outcome and analytic technique.
RESULTS: The number of publications increased six-fold between 1980–84 to 1995–99 from 61 to 440 citations per 5-year period. Thirty-two percent of all studies were published in journals for pediatrics or perinatal medicine and 26% appeared in sub-specialty journals. Cost-effectiveness analyses were most frequent, representing 74% of all studies. Throughout the period, the proportion of cost-effectiveness analyses increased by 50%, and decreased for cost-benefit and cost-minimization analyses. Although most studies were performed in children (1–12 years of age), this frequency decreased with time while studies in infants became more prevalent. Most publications were classified under the infective and parasitic ICD-9-CM category, comprising 24% of studies. Health prevention studies became less frequent and health treatment studies more predominant with time. Most studies consisted of malaria control and vaccination strategies for hepatitis B, Hemophilus influenzae type B, measles, and varicella. The most common health outcome measure was cases of abnormality, which accounted for 42% of outcomes.
CONCLUSIONS: The number of pediatric economic evaluations is steadily increasing with most publications representing health prevention interventions. The majority of publications include cost-effectiveness analyses, especially among children aged 1 to 12 years. Further research is ongoing to determine how the quality of the studies has changed over time.

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EVALUATING HEALTH PLAN MANAGEMENT OF EMPLOYER INDIRECT COSTS: METHODOLOGICAL ISSUES

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OBJECTIVE: Information on Managed Care Organizations' (MCOs) performance in managing direct and indirect costs (absenteeism and presenteeism) allows employers to make more informed purchasing decisions. This paper examines challenges in evaluating MCOs' management of indirect costs.
METHODS: The framework for evaluating MCOs compares "observed" to "expected" performance in managing lost productive work time (LPT) for a specific health condition. A credible and fair evaluation requires: i) a reference database defining "expected" LPT for a health condition; ii) LPT data on a random sample of the MCOs membership who work for pay defining "observed" performance; iii) metrics comparing observed to expected LPT for a specific health condition; and iv) a method to translate metrics into an understandable performance score. Issues related to each component are discussed below.
RESULTS: i) The reference must provide credible data on expected LPT for a specific health condition that includes missed workdays and lost productive time while at work. Self-reported information using a validated interview in a representative sample of US workers is one method. Recall period and essential data elements need to be considered. ii) Data collection should be in a representative sample of MCO members, interviewed using the reference population instrument. Cost/interview and prevalence of specific health conditions will drive sample size needs. iii) Two comparative metrics of interest include a) condition-specific prevalence; and b) LPT/week among those with the condition. We propose logistic regression to model LPT (a non-normally distributed variable) and adjust for covariates. iv) Resulting metrics must be translated into simple, easy-to-use, and universally understood terminology.
CONCLUSIONS: In operationalizing the MCO evaluation process, we consider a hypothetical application using data from the American Productivity Audit (an on-going national survey of health-related LPT) as a reference. We will examine the 10 health conditions with the greatest impact on work loss.

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ITEM REDUCTION OF A NEW PHARMACEUTICAL THERAPY RELATED QUALITY OF LIFE (PTRQOL) INSTRUMENT: FACTOR ANALYSIS METHOD OR CLINICAL IMPACT METHOD?

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In this study, two available methods of item reduction (factor analysis and clinical impact) are compared to determine the effect of the method of item reduction on the final PTRQoL instrument.
OBJECTIVE: To perform a factor analysis of 57-items of the developmental-version of the PTRQoL (d-PTRQoL) and to determine if the results differ from a previous clinical impact method item reduction of the same 57-items.
METHODS: Factor analysis (using principal axis factoring and direct oblimin method of rotation with 125 iterations) was performed on a dataset accumulated from a previous work to compare results of the clinical impact item reduction from a separate dataset. The dataset (n = 182) used was obtained earlier by a survey of patients from various community pharmacies using the d-PTRQoL (93-items on a six-point likert scale). Factor analysis was restricted to the same 57 items used in the